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Oxygen vacancy tuned Ohmic-Schottky conversion for enhanced performance in  $\alpha$ -Ga<sub>2</sub>O<sub>3</sub> solar-blind ultraviolet photodetectors

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#	Paper	IF	Citations
343	Bias tuning charge-releasing leading to negative differential resistance in amorphous gallium oxide/Nb:SrTiO <sub>3</sub> heterostructure. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 262110	3.4	28
342	Self-powered hybrid humidity sensor and dual-band UV photodetector fabricated on back-contact photovoltaic cell. <b>2015</b> , 219, 43-49		26
341	Amorphous Indium-Gallium-Oxide UV Photodetectors. <b>2015</b> , 27, 2083-2086		29
340	Room temperature ferromagnetism in (Ga <sub>1-x</sub> Mnx)2O <sub>3</sub> epitaxial thin films. <b>2015</b> , 3, 1830-1834		61
339	Unipolar resistive switching behavior of amorphous gallium oxide thin films for nonvolatile memory applications. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 042105	3.4	68
338	Toward the understanding of annealing effects on (GaIn) 2 O 3 films. <b>2015</b> , 578, 1-6		15
337	Magnetic anisotropy and deep ultraviolet photoresponse characteristics in Ga <sub>2</sub> O <sub>3</sub> :Cr vermicular nanowire thin film nanostructure. <b>2015</b> , 5, 12894-12898		29
336	Effects of dopant concentration on structural and near-infrared luminescence of Nd <sup>3+</sup> -doped beta-Ga <sub>2</sub> O <sub>3</sub> thin films. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 171910	3.4	66
335	Pulsed laser deposition of gallium oxide films for high performance solar-blind photodetectors. <b>2015</b> , 5, 1240		126
334	Interface induced transition from bipolar resistive switching to unipolar resistive switching in Au/Ti/GaOx/NiOx/ITO structures. <b>2015</b> , 5, 82403-82408		5
333	Abnormal bipolar resistive switching behavior in a Pt/GaO <sub>1.3</sub> /Pt structure. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 032104	3.4	39
332	The Influence of Different Partial Pressure on the Fabrication of InGaO Ultraviolet Photodetectors. <b>2016</b> , 16,		8
331	A new Bi-based visible-light-sensitive photocatalyst BiLa <sub>1.4</sub> Ca <sub>0.6</sub> O <sub>4.2</sub> : crystal structure, optical property and photocatalytic activity. <b>2016</b> , 6, 23235		13
330	Deep ultraviolet photoconductive and near-infrared luminescence properties of Er <sup>3+</sup> -doped βGa <sub>2</sub> O <sub>3</sub> thin films. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 211903	3.4	41
329	Influence of oxygen vacancies on the photoresponse of βGa <sub>2</sub> O <sub>3</sub> /SiCnβtype heterojunctions. <b>2016</b> , 49, 285111		38
328	Epitaxial growth and magnetic properties of ultraviolet transparent Ga <sub>2</sub> O <sub>3</sub> /(Ga <sub>1-x</sub> Fex) <sub>2</sub> O <sub>3</sub> multilayer thin films. <b>2016</b> , 6, 25166		21
327	Role of self-trapped holes in the photoconductive gain of βgallium oxide Schottky diodes. <b>2016</b> , 119, 103102		118

326	Observation of low voltage driven green emission from erbium doped Ga <sub>2</sub> O <sub>3</sub> light-emitting devices. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 022107	3.4	20
325	AlGa <sub>2</sub> O <sub>3</sub> solar-blind deep-ultraviolet photodetector based on a four-terminal structure with or without Zener diodes. <b>2016</b> , 6, 045009		31
324	Au plasmon enhanced high performance AlGa <sub>2</sub> O <sub>3</sub> solar-blind photo-detector. <b>2016</b> , 26, 65-68		30
323	AlGa <sub>2</sub> O <sub>3</sub> /p-Si heterojunction solar-blind ultraviolet photodetector with enhanced photoelectric responsivity. <b>2016</b> , 660, 136-140		169
322	Al <sub>2</sub> O <sub>3</sub> /β-Ga <sub>2</sub> O <sub>3</sub> (-201) Interface Improvement Through Piranha Pretreatment and Postdeposition Annealing. <b>2016</b> , 37, 1411-1414		80
321	Heterogeneous sensors of pressure sensor and ultraviolet photodetector fabricated by vertical 3D stacking as a multi-functional device. <b>2016</b> , 6, 97976-97982		1
320	Solar-blind photodetector based on Ga <sub>2</sub> O <sub>3</sub> nanowires array film growth from inserted Al <sub>2</sub> O <sub>3</sub> ultrathin interlayers for improving responsivity. <b>2016</b> , 6, 100683-100689		22
319	Inhibition of unintentional extra carriers by Mn valence change for high insulating devices. <b>2016</b> , 6, 24190		37
318	Deep ultraviolet photodetectors based on p-Si/i-SiC/n-Ga <sub>2</sub> O <sub>3</sub> heterojunction by inserting thin SiC barrier layer. <b>2016</b> , 122, 1		17
317	Characterization of hexagonal e-Ga <sub>1.8</sub> Sn <sub>0.2</sub> O <sub>3</sub> thin films for solar-blind ultraviolet applications. <b>2016</b> , 62, 651-654		21
316	Fabrication of flexible ultraviolet photodetectors using an all-spray-coating process. <b>2016</b> , 6, 045218		9
315	AlGa <sub>2</sub> O <sub>3</sub> thin films on sapphire pre-seeded by homo-self-templated buffer layer for solar-blind UV photodetector. <b>2016</b> , 51, 203-207		84
314	Epitaxial growth and solar-blind photoelectric properties of corundum-structured AlGa <sub>2</sub> O <sub>3</sub> thin films. <b>2016</b> , 164, 364-367		74
313	Improvement for the performance of solar-blind photodetector based on AlGa <sub>2</sub> O <sub>3</sub> thin films by doping Zn. <b>2017</b> , 50, 085102		19
312	Fabrication of AlGa <sub>2</sub> O <sub>3</sub> /ZnO heterojunction for solar-blind deep ultraviolet photodetection. <b>2017</b> , 32, 03LT01		85
311	Choosing the correct hybrid for defect calculations: A case study on intrinsic carrier trapping in AlGa <sub>2</sub> O <sub>3</sub> . <b>2017</b> , 95,		144
310	Growth and Characterization of Sn Doped AlGa <sub>2</sub> O <sub>3</sub> Thin Films and Enhanced Performance in a Solar-Blind Photodetector. <b>2017</b> , 46, 2366-2372		31
309	Solar-blind ultraviolet photodetector based on (LaAlO <sub>3</sub> ) <sub>0.3</sub> -(SrAl <sub>0.5</sub> Ta <sub>0.5</sub> O <sub>3</sub> ) <sub>0.7</sub> single crystal. <b>2017</b> , 7, 035302		7

308	Tuning the thickness of exfoliated quasi-two-dimensional $\alpha$ -Ga <sub>2</sub> O <sub>3</sub> flakes by plasma etching. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 131901	3-4	54
307	Direct charge carrier injection into Ga <sub>2</sub> O <sub>3</sub> thin films using an In <sub>2</sub> O <sub>3</sub> cathode buffer layer: their optical, electrical and surface state properties. <b>2017</b> , 50, 135109		10
306	A high-sensitive ultraviolet photodetector composed of double-layered TiO <sub>2</sub> nanostructure and Au nanoparticles film based on Schottky junction. <b>2017</b> , 194, 42-48		26
305	Zero-Power-Consumption Solar-Blind Photodetector Based on $\alpha$ -GaO/NSTO Heterojunction. <b>2017</b> , 9, 1619-1628		225
304	Solar-Blind Photodetector with High Avalanche Gains and Bias-Tunable Detecting Functionality Based on Metastable Phase $\alpha$ -GaO/ZnO Isotype Heterostructures. <b>2017</b> , 9, 36997-37005		106
303	Improvement of Ohmic contacts on Ga <sub>2</sub> O <sub>3</sub> through use of ITO-interlayers. <b>2017</b> , 35, 061201		27
302	High-Responsivity Deep-Ultraviolet-Selective Photodetectors Using Ultrathin Gallium Oxide Films. <b>2017</b> , 4, 2937-2943		92
301	Construction of GaN/Ga <sub>2</sub> O <sub>3</sub> p-n junction for an extremely high responsivity self-powered UV photodetector. <b>2017</b> , 5, 10562-10570		149
300	Mg-doped p-type $\alpha$ -Ga <sub>2</sub> O <sub>3</sub> thin film for solar-blind ultraviolet photodetector. <b>2017</b> , 209, 558-561		62
299	Growth and characterization of $\alpha$ -Ga <sub>2</sub> O <sub>3</sub> thin films by molecular beam epitaxy for deep-UV photodetectors. <b>2017</b> , 122, 095302		86
298	Molybdenum Incorporation Induced Enhancement in the Mechanical Properties of Gallium Oxide Films. <b>2017</b> , 4, 1700378		14
297	Experimental and theoretical investigation of Bixbyite (Mn <sub>0.8</sub> Ni <sub>0.2</sub> ) <sub>2</sub> O <sub>3</sub> nanoparticles for magnetic and electrochemical applications. <b>2017</b> , 443, 45-50		8
296	Thermal annealing effect on $\alpha$ -Ga <sub>2</sub> O <sub>3</sub> thin film solar blind photodetector heteroepitaxially grown on sapphire substrate. <b>2017</b> , 214, 1700063		32
295	Group-III Sesquioxides: Growth, Physical Properties and Devices. <b>2017</b> , 3, 1600350		127
294	Decrease of oxygen vacancy by Zn-doped for improving solar-blind photoelectric performance in $\alpha$ -Ga <sub>2</sub> O <sub>3</sub> thin films. <b>2017</b> , 13, 483-488		34
293	Ultrahigh-Responsivity, Rapid-Recovery, Solar-Blind Photodetector Based on Highly Nonstoichiometric Amorphous Gallium Oxide. <b>2017</b> , 4, 2203-2211		163
292	Ti-Doped GaO Resistive Switching Memory with Self-Rectifying Behavior by Using NbO/Pt Bilayers. <b>2017</b> , 9, 43336-43342		9
291	Evidence for the bias-driven migration of oxygen vacancies in amorphous non-stoichiometric gallium oxide. <b>2017</b> , 7, 065312		18

290	A self-powered deep-ultraviolet photodetector based on an epitaxial Ga <sub>2</sub> O <sub>3</sub> /Ga:ZnO heterojunction. <b>2017</b> , 5, 8688-8693	124
289	Migration mechanisms and diffusion barriers of vacancies in Ga <sub>2</sub> O <sub>3</sub> . <b>2017</b> , 95,	66
288	Novel green synthesis and improved solar-blind detection performance of hierarchical $\beta$ -Ga <sub>2</sub> O <sub>3</sub> nanospheres. <b>2017</b> , 5, 7161-7166	16
287	Scaling-Up of Bulk $\beta$ -Ga <sub>2</sub> O <sub>3</sub> Single Crystals by the Czochralski Method. <b>2017</b> , 6, Q3007-Q3011	209
286	$\beta$ -Ga <sub>2</sub> O <sub>3</sub> solar-blind deep-ultraviolet photodetector based on annealed sapphire substrate. <b>2017</b> , 140, 106-110	42
285	Fast-response solar-blind ultraviolet photodetector with a graphene/ $\beta$ -Ga <sub>2</sub> O <sub>3</sub> /graphene hybrid structure. <b>2017</b> , 692, 634-638	73
284	Epitaxial growth and characterization of CuGa <sub>2</sub> O <sub>4</sub> films by laser molecular beam epitaxy. <b>2017</b> , 7, 115216	8
283	Ultraviolet detectors based on (GaIn) <sub>2</sub> O <sub>3</sub> films. <b>2017</b> , 7, 3769	20
282	Electrical Study of Trapped Charges in Copper-Doped Zinc Oxide Films by Scanning Probe Microscopy for Nonvolatile Memory Applications. <b>2017</b> , 12, e0171050	11
281	Self-powered SBD solar-blind photodetector fabricated on the single crystal of $\beta$ -GaO <sub>2</sub> . <b>2018</b> , 8, 6341-6345	36
280	Modulated Al <sub>2</sub> O <sub>3</sub> -Alloyed Ga <sub>2</sub> O <sub>3</sub> Materials and Deep Ultraviolet Photodetectors. <b>2018</b> , 30, 549-552	27
279	Deep-ultraviolet photodetector based on exfoliated n-type $\beta$ -Ga <sub>2</sub> O <sub>3</sub> nanobelt/p-Si substrate heterojunction. <b>2018</b> , 35, 574-578	23
278	Characterization and Ultraviolet Photodetection Application of the Sm <sub>2</sub> O <sub>3</sub> /n-Si Heterojunction. <b>2018</b> , 47, 443-448	
277	Electrodeposited CuSCN metal-semiconductor-metal high performance deep-ultraviolet photodetector. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 021107	3-4 11
276	A review of Ga <sub>2</sub> O <sub>3</sub> materials, processing, and devices. <b>2018</b> , 5, 011301	1114
275	Structural, morphological, optical and magnetic properties of Ag <sub>3</sub> (2+x)In <sub>x</sub> Nb <sub>4-x</sub> O <sub>11</sub> + $\square$ (0.25 $\leq$ $\square$ $\leq$ 1.0) nanoparticles synthesized by sol-gel method. <b>2018</b> , 105, 121-125	4
274	Arrays of Solar-Blind Ultraviolet Photodetector Based on $\beta$ -Ga <sub>2</sub> O <sub>3</sub> Epitaxial Thin Films. <b>2018</b> , 30, 993-996	42
273	High performance self-powered ultraviolet photodetectors based on electrospun gallium nitride nanowires. <b>2018</b> , 452, 43-48	34

272	Low-voltage-worked photodetector based on Cu <sub>2</sub> O/GaOOH shell-core heterojunction nanorod arrays. <b>2018</b> , 755, 199-205			16
271	The Effect of Oxygen Vacancy Concentration on Indium Gallium Oxide Solar Blind Photodetector. <b>2018</b> , 65, 1817-1822			19
270	Schottky x-ray detectors based on a bulk $\beta$ -Ga <sub>2</sub> O <sub>3</sub> substrate. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 103502	3-4		44
269	Stabilizing the metastable $\beta$ phase in Ga <sub>2</sub> O <sub>3</sub> thin films by Cu doping. <b>2018</b> , 731, 1225-1229			18
268	High quality $\beta$ -Ga <sub>2</sub> O <sub>3</sub> film grown with N <sub>2</sub> O for high sensitivity solar-blind-ultraviolet photodetector with fast response speed. <b>2018</b> , 735, 150-154			99
267	MBE-Grown $\beta$ -Ga <sub>2</sub> O <sub>3</sub> -Based Schottky UV-C Photodetectors With Rectification Ratio $\sim 10^7$ . <b>2018</b> , 30, 2025-2028			44
266	Self-Powered Ultraviolet Photodetector with Superhigh Photoresponsivity (3.05 A/W) Based on the GaN/Sn:GaO pn Junction. <b>2018</b> , 12, 12827-12835			254
265	Deep-Ultraviolet Photodetectors Based on Epitaxial ZnGaO Thin Films. <b>2018</b> , 8, 14056			39
264	Deep-ultraviolet-triggered neuromorphic functions in In-Zn-O phototransistors. <i>Applied Physics Letters</i> , <b>2018</b> , 113, 151101	3-4		51
263	Post Annealing Effects on $\text{Er}_{2}\text{O}_{3}$ Nanowire Arrays for Improved Photodetection. <b>2018</b> , 17, 1189-1196			13
262	$\beta$ -Ga <sub>2</sub> O <sub>3</sub> for wide-bandgap electronics and optoelectronics. <b>2018</b> , 33, 113001			169
261	Optimizing the performance of a $\beta$ -Ga <sub>2</sub> O <sub>3</sub> solar-blind UV photodetector by compromising between photoabsorption and electric field distribution. <b>2018</b> , 8, 2918			34
260	Demonstration of zero bias responsivity in MBE grown $\beta$ -Ga <sub>2</sub> O <sub>3</sub> lateral deep-UV photodetector. <b>2018</b> , 57, 060313			47
259	Ultrahigh Performance of Self-Powered $\beta$ -Ga <sub>2</sub> O <sub>3</sub> Thin Film Solar-Blind Photodetector Grown on Cost-Effective Si Substrate Using High-Temperature Seed Layer. <b>2018</b> , 5, 2391-2401			165
258	Growth and characterization of co-sputtered aluminum-gallium oxide thin films on sapphire substrates. <b>2018</b> , 765, 894-900			25
257	Influence of annealing atmosphere on the performance of a $\beta$ -Ga <sub>2</sub> O <sub>3</sub> thin film and photodetector. <b>2018</b> , 8, 2229			37
256	High-Performance Graphene/ $\beta$ -Ga <sub>2</sub> O <sub>3</sub> Heterojunction Deep-Ultraviolet Photodetector with Hot-Electron Excited Carrier Multiplication. <b>2018</b> , 10, 22419-22426			123
255	Amorphous MgInO Ultraviolet Solar-Blind Photodetectors. <b>2019</b> , 7, 103250-103254			7

254	High-Performance Solar Blind Ultraviolet Photodetector Based on Single Crystal Orientation Mg-Alloyed Ga <sub>2</sub> O <sub>3</sub> Film Grown by a Nonequilibrium MOCVD Scheme. <b>2019</b> , 1, 1653-1659	18
253	Influence of trap level on an Al <sub>0.6</sub> Ga <sub>0.4</sub> N/Al <sub>0.5</sub> Ga <sub>0.5</sub> N metal-semiconductor-metal UV photodetector. <b>2019</b> , 58, SCCC26	1
252	Rectifying Effect of the Sr <sub>3</sub> Al <sub>2</sub> O <sub>6</sub> /Ga <sub>2</sub> O <sub>3</sub> Heterojunction. <b>2019</b> , 216, 1900570	7
251	Wearable Gallium Oxide Solar-Blind Photodetectors on Muscovite Mica Having Ultrahigh Photoresponsivity and Detectivity with Added High-Temperature Functionalities. <b>2019</b> , 1, 2463-2470	25
250	Rectifying characteristics and solar-blind photoresponse in E-Ga <sub>2</sub> O <sub>3</sub> /ZnO heterojunctions. <b>2019</b> , 28, 088503	3
249	Temperature-dependence of X-ray excited luminescence of E-Ga <sub>2</sub> O <sub>3</sub> single crystals. <i>Applied Physics Letters</i> , <b>2019</b> , 115, 071904	3-4 13
248	Photovoltaic effect in m-plane orientated ZnO epitaxial thin films. <i>Applied Physics Letters</i> , <b>2019</b> , 115, 082103	3-4 6
247	Deep-ultraviolet Schottky photodetectors with high deep-ultraviolet/visible rejection based on a ZnGa <sub>2</sub> O <sub>4</sub> thin film. <b>2019</b> , 496, 143670	20
246	Photoelectrochemical Self-Powered Solar-Blind Photodetectors Based on Ga <sub>2</sub> O <sub>3</sub> Nanorod Array/Electrolyte Solid/Liquid Heterojunctions with a Large Separation Interface of Photogenerated Carriers. <b>2019</b> , 2, 6169-6177	41
245	High-Performance Transparent Ultraviolet Photodetectors Based on InGaZnO Superlattice Nanowire Arrays. <b>2019</b> , 13, 12042-12051	19
244	Visible-blind wide-dynamic-range fast-response self-powered ultraviolet photodetector based on Cu/In-Ga-Zn-O heterojunction. <b>2019</b> , 15, 153-162	27
243	Effect of Defects on the Properties of ZnGa <sub>2</sub> O <sub>4</sub> Thin-Film Transistors. <b>2019</b> , 1, 253-259	7
242	Highly Narrow-Band Polarization-Sensitive Solar-Blind Photodetectors Based on E-GaO Single Crystals. <b>2019</b> , 11, 7131-7137	38
241	Influence of annealing temperature on structure and photoelectrical performance of E-Ga <sub>2</sub> O <sub>3</sub> /4H-SiC heterojunction photodetectors. <b>2019</b> , 798, 458-466	44
240	Surface related tunneling leakage in E-Ga <sub>2</sub> O <sub>3</sub> (001) vertical Schottky barrier diodes. <b>2019</b> , 12, 074008	14
239	E-Ga <sub>2</sub> O <sub>3</sub> Nanorod Array/Ti <sub>2</sub> O Microsphere p-n Junctions for Self-Powered Spectrum-Distinguishable Photodetectors. <b>2019</b> , 2, 4095-4103	58
238	Gallium oxide solar-blind ultraviolet photodetectors: a review. <b>2019</b> , 7, 8753-8770	179
237	Influence of growth temperature on the characteristics of E-Ga <sub>2</sub> O <sub>3</sub> epitaxial films and related solar-blind photodetectors. <b>2019</b> , 489, 101-109	41

236	Toward efficient photocatalytic pure water splitting for simultaneous H <sub>2</sub> and H <sub>2</sub> O <sub>2</sub> production. <b>2019</b> , 62, 823-831	78
235	Optical Float-Zone Grown Bulk $\beta$ -Ga <sub>2</sub> O <sub>3</sub> -Based Linear MSM Array of UV-C Photodetectors. <b>2019</b> , 31, 923-926	20
234	2D semiconductors towards high-performance ultraviolet photodetection. <b>2019</b> , 52, 303002	14
233	. <b>2019</b> , 66, 2276-2281	33
232	Ga <sub>2</sub> O <sub>3</sub> -based p-i-n solar blind deep ultraviolet photodetectors. <b>2019</b> , 30, 8445-8448	3
231	Ultrahigh Deep-UV Sensitivity in Graphene-Gated $\beta$ -Ga <sub>2</sub> O <sub>3</sub> Phototransistors. <b>2019</b> , 6, 1026-1032	48
230	Review of deep ultraviolet photodetector based on gallium oxide. <b>2019</b> , 28, 018501	42
229	The Structural and Photoelectrical Properties of Gallium Oxide Thin Film Grown by Radio Frequency Magnetron Sputtering. <b>2019</b> , 8, Q3086-Q3090	32
228	Impact of Oxygen Vacancy on the Photo-Electrical Properties of In <sub>2</sub> O <sub>3</sub> -Based Thin-Film Transistor by Doping Ga. <b>2019</b> , 12,	4
227	Simultaneously improved sensitivity and response speed of $\beta$ -Ga <sub>2</sub> O <sub>3</sub> solar-blind photodetector via localized tuning of oxygen deficiency. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 113506	3-4 28
226	Transition of photoconductive and photovoltaic operation modes in amorphous Ga <sub>2</sub> O <sub>3</sub> -based solar-blind detectors tuned by oxygen vacancies. <b>2019</b> , 28, 028501	13
225	Ultraviolet photodetectors based on wide bandgap oxide semiconductor films. <b>2019</b> , 28, 048503	20
224	Optical properties for the oxygen vacancies in $\beta$ -Ga <sub>2</sub> O <sub>3</sub> based on first-principles calculations. <b>2019</b> , 6, 075913	3
223	Investigation of Bandgap Engineering of Gallium Zinc Oxide-Based Ultraviolet Photodetector by Mist Atmospheric Pressure Chemical Vapor Deposition. <b>2019</b> , 66, 2256-2262	6
222	Nanowire-Seeded Growth of Single-Crystalline (010) $\beta$ -Ga <sub>2</sub> O <sub>3</sub> Nanosheets with High Field-Effect Electron Mobility and On/Off Current Ratio. <b>2019</b> , 15, e1900580	20
221	High-temperature photocurrent mechanism of $\beta$ -Ga <sub>2</sub> O <sub>3</sub> based metal-semiconductor-metal solar-blind photodetectors. <b>2019</b> , 125, 144501	43
220	Review of gallium oxide based field-effect transistors and Schottky barrier diodes. <b>2019</b> , 28, 017105	39
219	Synthesis of free-standing Ga <sub>2</sub> O <sub>3</sub> films for flexible devices by water etching of Sr <sub>3</sub> Al <sub>2</sub> O <sub>6</sub> sacrificial layers. <b>2019</b> , 28, 017305	3



218	Zinc oxide ultraviolet photodetectors: rapid progress from conventional to self-powered photodetectors. <b>2019</b> , 1, 2059-2085	121
217	Influence of oxygen on sputtering of aluminum-gallium oxide films for deep-ultraviolet detector applications. <b>2019</b> , 791, 1213-1219	11
216	Resistive switching behavior and mechanism in flexible TiO <sub>2</sub> @Cf memristor crossbars. <b>2019</b> , 45, 10182-10186	10
215	Recent Progress in Solar-Blind Deep-Ultraviolet Photodetectors Based on Inorganic Ultrawide Bandgap Semiconductors. <b>2019</b> , 29, 1806006	189
214	In situ synthesis of monoclinic $\beta$ -Ga <sub>2</sub> O <sub>3</sub> nanowires on flexible substrate and solar-blind photodetector. <b>2019</b> , 787, 133-139	24
213	Surface functionalization-induced photoresponse characteristics of monolayer MoS <sub>2</sub> for fast flexible photodetectors. <b>2019</b> , 11, 4726-4734	26
212	Leakage Current by Poole-Frenkel Emission in Pt Schottky Contacts on $\beta$ -Ga <sub>2</sub> O <sub>3</sub> Grown by Edge-Defined Film-Fed Growth. <b>2019</b> , 8, Q3054-Q3057	14
211	X-ray Detection Performance of Vertical Schottky Photodiodes Based on a Bulk $\beta$ -Ga <sub>2</sub> O <sub>3</sub> Substrate Grown by an EFG Method. <b>2019</b> , 8, Q3046-Q3049	17
210	A high-performance ultraviolet solar-blind photodetector based on a $\beta$ -Ga <sub>2</sub> O <sub>3</sub> Schottky photodiode. <b>2019</b> , 7, 13920-13929	50
209	The Growth of GaO Nanowires on Silicon for Ultraviolet Photodetector. <b>2019</b> , 19,	11
208	Highly preferred orientation of Ga <sub>2</sub> O <sub>3</sub> films sputtered on SiC substrates for deep UV photodetector application. <b>2019</b> , 471, 694-702	36
207	Sub-microsecond response time deep-ultraviolet photodetectors using $\beta$ -Ga <sub>2</sub> O <sub>3</sub> thin films grown via low-temperature atomic layer deposition. <b>2019</b> , 780, 400-407	30
206	Effects of depositing temperature on structural, optical and laser-induced damage properties of Ga <sub>2</sub> O <sub>3</sub> films deposited by electronic beam evaporation. <b>2019</b> , 113, 192-197	5
205	Graphene Interdigital Electrodes for Improving Sensitivity in a GaO:Zn Deep-Ultraviolet Photoconductive Detector. <b>2019</b> , 11, 1013-1020	45
204	Advances in Ga <sub>2</sub> O <sub>3</sub> solar-blind UV photodetectors. <b>2019</b> , 369-399	23
203	Enhanced performance of solar-blind ultraviolet photodetector based on Mg-doped amorphous gallium oxide film. <b>2019</b> , 159, 204-208	26
202	Progress of Ultra-Wide Bandgap Ga <sub>2</sub> O <sub>3</sub> Semiconductor Materials in Power MOSFETs. <b>2020</b> , 35, 5157-5179	59
201	A self-powered solar-blind photodetector with large Voc enhancing performance based on the PEDOT:PSS/Ga <sub>2</sub> O <sub>3</sub> organic/inorganic hybrid heterojunction. <b>2020</b> , 8, 1292-1300	45

200	Inhibition of volatilization and polycrystalline cracking, and the optical properties of $\text{Ga}_2\text{O}_3$ grown by the EFG method. <b>2020</b> , 22, 924-931	6
199	An ultrahigh responsivity self-powered solar-blind photodetector based on a centimeter-sized $\text{GaO}$ /polyaniline heterojunction. <b>2020</b> , 12, 1406-1413	41
198	Scintillation Properties of $\beta\text{-Ga}_2\text{O}_3$ Single Crystal Excited by $\alpha$ -Ray. <b>2020</b> , 67, 400-404	6
197	Laser sintering method induced c-axis growth of $\text{Mg}_{0.2}\text{Zn}_{0.8}\text{O}$ nano-film for ultraviolet photodetector. <b>2020</b> , 31, 505-510	3
196	Comparison of optoelectrical characteristics between Schottky and Ohmic contacts to $\text{Ga}_2\text{O}_3$ thin film. <b>2020</b> , 53, 085105	26
195	High responsivity tin gallium oxide Schottky ultraviolet photodetectors. <b>2020</b> , 38, 013403	14
194	Performance of polycrystalline GaN based metal-semiconductor-metal (MSM) photodetector with different contact. <b>2020</b> , 138, 106369	7
193	Gallium oxide-based solar-blind ultraviolet photodetectors. <b>2020</b> , 35, 023001	40
192	Facile Fabrication of $\text{Ga}_2\text{O}_3$ Nanorods for Photoelectrochemical Water Splitting. <b>2020</b> , 6, 208-211	4
191	Impact of annealing temperature on band-alignment of PLD grown $\text{Ga}_2\text{O}_3/\text{Si}$ (100) heterointerface. <b>2020</b> , 819, 153052	30
190	$\text{In}_2\text{O}_3/\text{TiO}_2$ Heterostructure for Highly Responsive Low-Noise Ultraviolet Photodetector. <b>2020</b> , 67, 166-172	9
189	Monolithically Integrated Enhancement-Mode and Depletion-Mode $\text{GaO}$ MESFETs with Graphene-Gate Architectures and Their Logic Applications. <b>2020</b> , 12, 7310-7316	19
188	Structural, optical, thermal, dielectric and Z-scan study on novel (2E)-1-(4-aminophenyl)-3-(4-benzyloxyphenyl)-prop-2-en-1-one (APBPP) chalcone crystal for nonlinear optical applications. <b>2020</b> , 109, 110331	5
187	Crystalline characteristics and solar-blind photodetecting performances of $\text{Ga}_2\text{O}_3$ film grown on silicon thermal oxide wafer using an EBV method. <b>2020</b> , 8, 11970-11979	0
186	GaN ultraviolet photodetector with petal-like $\text{Ga}_2\text{O}_3$ microcrystalline layer. <b>2020</b> , 10, 125107	1
185	On the response of gamma irradiation on atomic layer deposition-grown $\text{Ga}_2\text{O}_3$ films and $\text{Au-Ga}_2\text{O}_3\text{-Au}$ deep ultraviolet solar-blind photodetectors. <b>2020</b> , 38, 062409	2
184	Silicon Nitride Deep-Ultraviolet Photoconductive Detector. <b>2020</b> , 41, 1316-1319	6
183	Phase dependent radiation hardness and performance analysis of amorphous and polycrystalline $\text{Ga}_2\text{O}_3$ solar-blind photodetector against swift heavy ion irradiation. <b>2020</b> , 128, 065902	6

182	High-performance high-temperature solar-blind photodetector based on polycrystalline Ga <sub>2</sub> O <sub>3</sub> film. <b>2020</b> , 847, 156536		15
181	Ga <sub>2</sub> O <sub>3</sub> -based solar-blind deep ultraviolet light-emitting diodes. <b>2020</b> , 224, 117326		12
180	Hydrogen Terminated Germanene for a Robust Self-Powered Flexible Photoelectrochemical Photodetector. <b>2020</b> , 16, e2000283		32
179	Resistive random access memory based on gallium oxide thin films for self-powered pressure sensor systems. <b>2020</b> , 46, 21141-21148		3
178	Performance improvement of amorphous Ga <sub>2</sub> O <sub>3</sub> ultraviolet photodetector by annealing under oxygen atmosphere. <b>2020</b> , 840, 155585		27
177	All-Oxide NiO/Ga <sub>2</sub> O <sub>3</sub> p <i>n</i> Junction for Self-Powered UV Photodetector. <b>2020</b> , 2, 2032-2038		47
176	Dark-current reduction accompanied photocurrent enhancement in p-type MnO quantum-dot decorated n-type 2D-MoS <sub>2</sub> -based photodetector. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 112102	3-4	17
175	Phase junction enhanced photocatalytic activity of GaO nanorod arrays on flexible glass fiber fabric.. <b>2020</b> , 10, 11499-11506		3
174	Whole Metal Oxide p-i-n Deep Ultraviolet Light-Emitting Diodes Using i-GaN Active Emissive Film. <b>2020</b> , 32, 941-943		5
173	Determination of the band offsets of the Ga <sub>2</sub> O <sub>3</sub> :Si/FTO heterojunction for current spreading applications. <b>2020</b> , 53, 314003		5
172	Tuning the responsivity of monoclinic $(\text{In}_x\text{Ga}_{1-x})_2\text{O}_3$ solar-blind photodetectors grown by metal organic chemical vapor deposition. <b>2020</b> , 53, 454001		13
171	Surface states on (001) oriented $\text{Ga}_2\text{O}_3$ epilayers, their origin, and their effect on the electrical properties of Schottky barrier diodes. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 092101	3-4	14
170	Bipolar resistive switching of Pt/GaO/SiC/Pt thin film with ultrahigh OFF/ON resistance ratios. <b>2020</b> , 31, 225206		3
169	Self-Powered Solar-Blind Photodetectors Based on $\text{Al}_2\text{O}_3/\text{Ga}_2\text{O}_3$ Phase Junction of Ga <sub>2</sub> O <sub>3</sub> . <b>2020</b> , 13,		55
168	High sensitivity and fast response self-powered solar-blind ultraviolet photodetector with a $\text{Ga}_2\text{O}_3$ /spiro-MeOTAD p <i>n</i> heterojunction. <b>2020</b> , 8, 4502-4509		34
167	Facile fabrication of eutectic gallium-indium alloy nanostructure and application in photodetection. <b>2020</b> , 31, 145703		3
166	Effects of Oxygen Annealing of $\text{Ga}_2\text{O}_3$ Epilayers on the Properties of Vertical Schottky Barrier Diodes. <b>2020</b> , 9, 024004		9
165	Metal-Semiconductor-Metal $\text{Ga}_2\text{O}_3$ Solar-Blind Photodetectors with a Record-High Responsivity Rejection Ratio and Their Gain Mechanism. <b>2020</b> , 7, 812-820		69

164	High-performance amorphous BeZnO-alloy-based solar-blind ultraviolet photodetectors on rigid and flexible substrates. <b>2020</b> , 831, 154819	10
163	Fabrication of $\gamma$ -Ga <sub>2</sub> O <sub>3</sub> solar-blind photodetector with symmetric interdigital Schottky contacts responding to low intensity light signal. <b>2020</b> , 53, 295109	23
162	Surface Oxygen Vacancy Formation Energy Calculations in 34 Orientations of $\beta$ -Ga <sub>2</sub> O <sub>3</sub> and $\beta$ -Al <sub>2</sub> O <sub>3</sub> . <b>2020</b> , 124, 10509-10522	11
161	Ultra-wide-bandgap (ScGa) <sub>2</sub> O <sub>3</sub> alloy thin films and related sensitive and fast responding solar-blind photodetectors. <b>2020</b> , 834, 155036	8
160	The Photoluminescence Properties of $\beta$ -Ga <sub>2</sub> O <sub>3</sub> Thin Films. <b>2020</b> , 49, 4544-4549	6
159	Ultrahigh-performance planar $\beta$ -Ga <sub>2</sub> O <sub>3</sub> solar-blind Schottky photodiode detectors. <b>2021</b> , 64, 59-64	12
158	High performance solar-blind UV detector based on $\beta$ -Ga <sub>2</sub> O <sub>3</sub> /GaN nanowires heterojunction. <b>2021</b> , 866, 157564	11
157	Patterned growth of $\beta$ -Ga <sub>2</sub> O <sub>3</sub> thin films for solar-blind deep-ultraviolet photodetectors array and optical imaging application. <b>2021</b> , 72, 189-196	28
156	Status and Outlook of Metal/Inorganic Semiconductor/Metal Photodetectors. <b>2021</b> , 15, 2000401	23
155	Epitaxial growth of $\beta$ -Ga <sub>2</sub> O <sub>3</sub> (001) thin film on four-fold symmetry CeO <sub>2</sub> (001) substrate for heterogeneous integrations.	2
154	Optical and Electronic Energy Band Properties of Nb-Doped $\beta$ -Ga <sub>2</sub> O <sub>3</sub> Crystals. <b>2021</b> , 11, 135	1
153	Electrical tuning effect for Schottky barrier and hot-electron harvest in a plasmonic Au/TiO nanostructure. <b>2021</b> , 11, 338	2
152	Epitaxial growth of $\beta$ -(AlGa) <sub>2</sub> O <sub>3</sub> films on sapphire substrate by PLD and the fabrication of photodetectors. <b>2021</b> , 11, 219	2
151	Effect of N-doping on the performance of $\beta$ -Ga <sub>2</sub> O <sub>3</sub> thin film solar-blind ultraviolet detector. <b>2021</b> , 0-0	
150	High-Performance X-ray Detector Based on Single-Crystal $\beta$ -GaO:Mg. <b>2021</b> , 13, 2879-2886	9
149	Formation of $\beta$ -Ga <sub>2</sub> O <sub>3</sub> nanorings from metal-organic frameworks and their high catalytic activity for epoxidation of alkenes. <b>2021</b> , 9, 349-357	2
148	Balanced performance for $\beta$ -Ga <sub>2</sub> O <sub>3</sub> solar blind photodetectors: The role of oxygen vacancies. <b>2021</b> , 112, 110808	14
147	Facile synthesis of $\beta$ -Ga <sub>2</sub> O <sub>3</sub> nanowires network for solar-blind ultraviolet photodetector. <b>2021</b> , 54, 175106	5

146	A Strategic Review on Gallium Oxide Based Deep-Ultraviolet Photodetectors: Recent Progress and Future Prospects. <b>2021</b> , 9, 2002160	62
145	Amorphous gallium oxide (a-Ga <sub>2</sub> O <sub>3</sub> )-based high-temperature bendable solar-blind ultraviolet photodetector. <b>2021</b> , 36, 045010	5
144	Progress in state-of-the-art technologies of Ga <sub>2</sub> O <sub>3</sub> devices. <b>2021</b> , 54, 243001	20
143	Highly sensitive solar-blind deep ultraviolet photodetector based on graphene/PtSe <sub>2</sub> /EGa <sub>2</sub> O <sub>3</sub> 2D/3D Schottky junction with ultrafast speed. <b>2021</b> , 14, 1973-1979	52
142	Toward Large-Scale GaO Membranes via Quasi-Van Der Waals Epitaxy on Epitaxial Graphene Layers. <b>2021</b> , 13, 13410-13418	3
141	Improvement of sensing sensitivity based on green emissions from Er-doped (AlGa) <sub>2</sub> O <sub>3</sub> films. <b>2021</b> , 232, 117879	2
140	AlGa <sub>N</sub> /Ga <sub>N</sub> Metal-Oxide-Semiconductor High-Electron Mobility Transistors Using Ga <sub>2</sub> O <sub>3</sub> Gate Dielectric Layer Grown by Vapor Cooling Condensation System. <b>2021</b> , 50, 3748-3753	3
139	Modulating the Electrical Transport Characteristics of a Metal-Semiconductor-Metal Structure by Local Strain Gradient. <b>2021</b> ,	
138	Influence of oxygen partial pressure on properties of monoclinic Ga <sub>2</sub> O <sub>3</sub> deposited on sapphire substrates. <b>2021</b> , 39, 033414	
137	Influence of N <sub>2</sub> O/TEGa Ratio on Deposition of EGa <sub>2</sub> O <sub>3</sub> Films and Performance of Au-EGa <sub>2</sub> O <sub>3</sub> -Au Solar-Blind Photodetectors. <b>2021</b> , 10, 057001	1
136	Comparative studies of metal-organic decomposed Ga <sub>x</sub> Ce <sub>y</sub> O <sub>z</sub> and CeO <sub>2</sub> based functional MOS capacitor. <b>2021</b> , 45, 18257-18261	0
135	Enhancement of Responsivity in Solar-Blind UV Detector With Back-Gate MOS Structure Fabricated on EGa <sub>2</sub> O <sub>3</sub> Films. <b>2021</b> , 8,	1
134	Electrode-Dependent Electrical Properties of Detection-Band Tunable Ultraviolet Photodetectors Based on Ga <sub>2</sub> O <sub>3</sub> /Ga <sub>N</sub> Heterostructures. <b>2021</b> , 218, 2100166	0
133	Morphological and Electrical Properties of EGa <sub>2</sub> O <sub>3</sub> /4H-SiC Heterojunction Diodes. <b>2021</b> , 17, 479	5
132	Imaging Array and Complementary Photosensitive Inverter Based on P-Type SnO Thin-Film Phototransistors. <b>2021</b> , 42, 1010-1013	5
131	Fast-response X-ray detector based on nanocrystalline Ga <sub>2</sub> O <sub>3</sub> thin film prepared at room temperature. <b>2021</b> , 554, 149619	4
130	Reliability study on deep-ultraviolet photodetectors based on ZnGa <sub>2</sub> O <sub>4</sub> epilayers grown by MOCVD. <b>2021</b> , 555, 149657	6
129	16 $\times$ 16 Linear Solar-Blind UV Photoconductive Detector Array Based on EGa <sub>2</sub> O <sub>3</sub> Film. <b>2021</b> , 68, 3435-3438	11

128	Comprehensively Improved Performance of $\text{EGaO}$ Solar-Blind Photodetector Enabled by a Homojunction with Unique Passivation Mechanisms. <b>2021</b> , 13, 40837-40846	11
127	Determination of type-II band alignment $\text{EGa}_2\text{O}_3/\text{GaAs}$ heterojunction interface by x-ray photoelectron spectroscopy. <b>2021</b> , 130, 075301	3
126	Low Deposition Temperature Amorphous ALD- $\text{GaO}$ Thin Films and Decoration with $\text{MoS}_2$ Multilayers toward Flexible Solar-Blind Photodetectors. <b>2021</b> , 13, 41802-41809	2
125	Micron-Thick Hexagonal Boron Nitride Crystalline Film for Vacuum Ultraviolet Photodetection with Improved Sensitivity and Spectral Response. <b>2021</b> , 3, 3774-3780	1
124	Ultra-High Performance Amorphous $\text{Ga}_2\text{O}_3$ Photodetector Arrays for Solar-Blind Imaging. <b>2021</b> , 8, e2101106	19
123	Temperature-dependent electrical characteristics of $\text{Ga}_2\text{O}_3$ trench Schottky barrier diodes via self-reactive etching. <b>2021</b> , 54, 425104	5
122	High-performance $\text{EGa}_2\text{O}_3$ solar-blind ultraviolet photodetectors epitaxially grown on (110) $\text{TiO}_2$ substrates by metalorganic chemical vapor deposition. <b>2021</b> , 191, 110402	9
121	Catalyst-assisted heteroepitaxial strategy for highly ordered- $\text{GaO}$ nanoarrays and their optical property investigation. <b>2021</b> , 32,	0
120	A broadband UV-visible photodetector based on a $\text{Ga}_2\text{O}_3/\text{BFO}$ heterojunction. <b>2021</b> , 96, 125823	4
119	Optoelectronic artificial synapses based on $\text{EGa}_2\text{O}_3$ films by RF magnetron sputtering. <b>2021</b> , 192, 110422	7
118	Post-annealing effects on Si-doped $\text{Ga}_2\text{O}_3$ photodetectors grown by pulsed laser deposition. <b>2021</b> , 877, 160291	9
117	Enhanced solar-blind photoresponse characteristics in $\text{EGa}_2\text{O}_3$ epitaxial films on large miscut sapphire substrates. <b>2021</b> , 877, 160143	4
116	Performance enhancement of $\text{ZnGa}_2\text{O}_4$ Schottky type deep-ultraviolet photodetectors by oxygen supercritical fluid treatment. <b>2021</b> , 29, 104764	2
115	Fast-response self-powered solar-blind photodetector based on $\text{Pt}/\text{EGa}_2\text{O}_3$ Schottky barrier diodes. <b>2021</b> , 245, 167715	0
114	Interface optimization of free-standing $\text{CdZnTe}$ films for solar-blind ultraviolet detection: Substrate dependence. <b>2021</b> , 193, 110484	1
113	The effect of oxygen annealing on characteristics of $\text{EGa}_2\text{O}_3$ solar-blind photodetectors on $\text{SiC}$ substrate by ion-cutting process. <b>2022</b> , 889, 161743	2
112	Oxygen vacancies modulating the photodetector performances in $\text{EGa}_2\text{O}_3$ thin films. <b>2021</b> , 9, 5437-5444	21
111	Fabrication and Characterization of $\text{GaN}$ -Based Fin-Channel Array Metal-Oxide-Semiconductor High-Electron Mobility Transistors With Recessed-Gate and $\text{GaO}$ Gate Insulator Layer. <b>2021</b> , 1-1	1

110	CuO Single-Nanowire-Based White-Light Photodetector. <b>2021</b> , 1-1	4
109	Spectrally Selective and Highly Sensitive UV Photodetection with UV-A,C Band Specific Polarity Switching in Silver Plasmonic Nanoparticle Enhanced Gallium Oxide Thin-Film. <b>2020</b> , 8, 2000212	19
108	Anisotropy and in-plane polarization of low-symmetrical $\beta$ -Ga <sub>2</sub> O <sub>3</sub> single crystal in the deep ultraviolet band. <b>2020</b> , 527, 146648	4
107	Broadband Ultraviolet Self-Powered Photodetector Constructed on Exfoliated GaO/CuI Core-Shell Microwire Heterojunction with Superior Reliability. <b>2021</b> , 12, 447-453	39
106	Effect of ZnTe transition layer to the performance of CdZnTe/GaN multilayer films for solar-blind photodetector applications. <b>2020</b> , 53, 415105	6
105	Flexible and highly stable solar-blind photodetector based on room-temperature synthesis of amorphous Ga <sub>2</sub> O <sub>3</sub> film. <b>2020</b> , 53, 484004	5
104	Review of polymorphous Ga <sub>2</sub> O <sub>3</sub> materials and their solar-blind photodetector applications. <b>2021</b> , 54, 043001	49
103	Research of nanopore structure of GaO film in MOCVD for improving the performance of UV photoresponse. <b>2021</b> , 32, 095301	3
102	Electronic structure and optical properties of Ge- and F-doped $\beta$ -Ga <sub>2</sub> O <sub>3</sub> : First-principles investigations. <b>2020</b> , 29, 126301	3
101	First-principles study of self-trapped holes and acceptor impurities in Ga <sub>2</sub> O <sub>3</sub> polymorphs. <b>2019</b> , 3,	50
100	Band alignment at surfaces and heterointerfaces of Al <sub>2</sub> O <sub>3</sub> , Ga <sub>2</sub> O <sub>3</sub> , In <sub>2</sub> O <sub>3</sub> , and related group-III oxide polymorphs: A first-principles study. <b>2019</b> , 3,	18
99	Theory of High Field Transport in $\beta$ -Ga <sub>2</sub> O <sub>3</sub> . <b>2019</b> , 28, 1940008	1
98	The Effect of Mn Dopant on Structural and Optoelectronic Properties of $\beta$ -Ga <sub>2</sub> O <sub>3</sub> thin Film Photodetectors. <b>2020</b> , 9, 055010	3
97	Effects of Post Annealing on Electrical Performance of Polycrystalline GaO Photodetector on Sapphire. <b>2020</b> , 15, 100	8
96	All-silicon photovoltaic detectors with deep ultraviolet selectivity. <b>2020</b> , 1,	43
95	Tin gallium oxide solar-blind photodetectors on sapphire grown by molecular beam epitaxy. <b>2019</b> , 58, D22-D27	17
94	Localized surface plasmon enhanced GaO solar blind photodetectors. <b>2020</b> , 28, 5731-5740	18
93	High-performance $\beta$ -GaO thickness dependent solar blind photodetector. <b>2020</b> , 28, 4169-4177	16

92	High-performance nanoporous-GaN metal-insulator-semiconductor ultraviolet photodetectors with a thermal oxidized $\text{EGaO}$ layer. <b>2019</b> , 44, 2197-2200	14
91	Single-layer graphene electrode enhanced sensitivity and response speed of $\text{EGa}_2\text{O}_3$ solar-blind photodetector. <b>2019</b> , 9, 1394	4
90	Review of gallium-oxide-based solar-blind ultraviolet photodetectors. <b>2019</b> , 7, 381	203
89	Ultra-wide bandgap semiconductor of $\text{EGa}_2\text{O}_3$ and its research progress of deep ultraviolet transparent electrode and solar-blind photodetector. <b>2019</b> , 68, 078501	16
88	Performance Improvement of Amorphous $\text{Ga}_2\text{O}_3/\text{P-Si}$ Deep Ultraviolet Photodetector by Oxygen Plasma Treatment. <b>2021</b> , 11, 1248	0
87	Zn/Mg co-alloyed for higher photoelectric performance and unchanged spectral response in $\text{EGa}_2\text{O}_3$ solar-blind photodetector. <b>2022</b> , 55, 035103	2
86	Recrystallization behavior, oxygen vacancy and photoluminescence performance of sputter-deposited $\text{Ga}_2\text{O}_3$ films via high-vacuum in situ annealing. <b>2021</b> , 48, 3481-3481	0
85	Effect of oxygen flow ratio on crystallization and structural characteristics of gallium oxide thin films. <b>2021</b> ,	
84	The influence of $\text{EGa}_2\text{O}_3$ film thickness on the optoelectronic properties of $\text{EGa}_2\text{O}_3/\text{ZnO}$ nanocomposite heterogeneous materials. <b>2021</b> , 29, 102873	6
83	Photodetectors. <b>2020</b> , 703-725	
82	Toward emerging gallium oxide semiconductors: A roadmap. <b>2021</b> , 1, 697-697	8
81	Growth of metal-organic decomposed ternary $\text{Ga}_x\text{Ce}_y\text{O}_z$ films by nitrogen-infused wet oxidation for metal-oxide-semiconductor capacitor.	0
80	Correlation between deep-level defects and functional properties of $\text{E}(\text{Sn}_x\text{Ga}_{1-x})_2\text{O}_3$ on Si photodetectors. <b>2021</b> , 130, 204501	2
79	Photoinduced carrier transport mechanism in pn- and nn-GaN/GaON heterojunctions. <b>2022</b> , 40, 012204	0
78	Electrical characterisation of $\text{EGa}_2\text{O}_3$ Schottky diode for deep UV sensor applications. <b>2020</b> ,	0
77	Structural characterization of defects in EFG- and HVPE-grown $\text{EGa}_2\text{O}_3$ crystals.	0
76	Current advances in solar-blind photodetection technology: using $\text{Ga}_2\text{O}_3$ and AlGaIn. <b>2022</b> , 10, 1573-1593	8
75	Solar-blind ultraviolet detector based on ordered nanoporous $\text{EGa}_2\text{O}_3$ film.	



74	Crystallization and bandgap variation of non-stoichiometric amorphous Ga <sub>2</sub> O <sub>3-x</sub> thin films during post-annealing process. <b>2022</b> , 585, 152771	1
73	Low-Cost Solution-Processed MoS <sub>2</sub> /Quantum Dots-Based Deep UV Photodetector for Monitoring Disinfection. <b>2022</b> , 1-7	2
72	Ga <sub>2</sub> O <sub>3</sub> /In <sub>2</sub> O <sub>3</sub> Heterojunction Photovoltaic Photodetector With Superhigh Solar-Blind Spectral Discriminability. <b>2022</b> , 1-6	2
71	Room-Temperature Processed Lateral Trench-Metal/Insulator/Semiconductor Schottky Barrier Diodes with Amorphous Gallium Oxide (a-Ga <sub>2</sub> O <sub>3</sub> ) Thin Films on Single-Crystal Silicon <100>. 2200054	0
70	Influence of Substrate Temperature on Structure and Properties of Nb-Doped $\alpha$ -Ga <sub>2</sub> O <sub>3</sub> Films. <b>2022</b> , 51, 2390-2395	0
69	Flexible fast responding solar-blind photodetectors based on (TmGa) <sub>2</sub> O <sub>3</sub> films grown on mica. <i>Applied Physics Letters</i> , <b>2022</b> , 120, 122108	3-4 0
68	Ultrasensitive Self-Powered Deep-Ultraviolet Photodetector Based on In Situ Epitaxial Ga <sub>2</sub> O <sub>3</sub> /Bi <sub>2</sub> Se <sub>3</sub> Heterojunction. <b>2022</b> , 69, 1894-1899	1
67	Effect of oxygen vacancies in heteroepitaxial $\alpha$ -Ga <sub>2</sub> O <sub>3</sub> thin film solar blind photodetectors. <b>2022</b> , 144, 106621	1
66	Theoretical Insights for Improving the Schottky-Barrier Height at the Ga <sub>2</sub> O <sub>3</sub> /Pt Interface. <b>2021</b> , 16,	0
65	Quasi-Epitaxial Growth of $\alpha$ -GaO-Coated Wide Band Gap Semiconductor Tape for Flexible UV Photodetectors.. <b>2021</b> ,	6
64	Control and understanding of metal contacts to $\alpha$ -Ga <sub>2</sub> O <sub>3</sub> single crystals: a review. <b>2022</b> , 4, 1	2
63	Ga-In Nanoparticle Induced UV Plasmonic Impact on Heterojunction based Deep UV Photodetector. <b>2022</b> , 1-1	1
62	Improved $\alpha$ -Ga <sub>2</sub> O <sub>3</sub> Solar-Blind Deep-Ultraviolet Thin-Film Transistor Based on Si-Doping. 1	
61	Recent progress on the effects of impurities and defects on the properties of Ga <sub>2</sub> O <sub>3</sub> .	3
60	Trace Al component in $\alpha$ -(Al <sub>x</sub> Ga <sub>1-x</sub> ) <sub>2</sub> O <sub>3</sub> alloy films and film-based solar-blind photodetectors. <b>2022</b> ,	
59	Ultrasensitive fully transparent amorphous Ga <sub>2</sub> O <sub>3</sub> solar-blind deep-ultraviolet photodetector for corona discharge detection. <b>2022</b> , 55, 305104	2
58	Organic Ion Template-Guided Solution Growth of Ultrathin Bismuth Oxyselenide with Tunable Electronic Properties for Optoelectronic Applications. 2201020	0
57	The effect of annealing on the Sn-doped (001) $\alpha$ -Ga <sub>2</sub> O <sub>3</sub> bulk. <b>2022</b> , 147, 106752	0

56	Phase-defined growth of In <sub>2</sub> Se <sub>3</sub> thin films using PLD technique for high performance self-powered UV photodetector. <b>2022</b> , 595, 153505	1
55	Hydrogen-Terminated Diamond MOSFETs Using Ultrathin Glassy Ga <sub>2</sub> O <sub>3</sub> Dielectric Formed by Low-Temperature Liquid Metal Printing Method.	1
54	Rapid-thermal-annealing-induced microstructural evolution of Au/Ni/EGa <sub>2</sub> O <sub>3</sub> Schottky diodes correlated with their electrical properties. <b>2022</b> , 918, 165622	1
53	Projected Cost of Gallium Oxide Wafers from Edge-Defined Film-Fed Crystal Growth.	0
52	Interfacial Engineering of SnS/Ga <sub>2</sub> O <sub>3</sub> Heterojunction by SnO for a High-Performance Self-Powered Solar-Blind UV Photodetector. 2200851	
51	Ultrasensitive Flexible EPhase Ga <sub>2</sub> O <sub>3</sub> Solar-Blind Photodetector. <b>2022</b> , 14, 34844-34854	2
50	Improved Photoelectric Performance with Self-Powered Characteristics through TiO <sub>2</sub> Surface Passivation in an EGa <sub>2</sub> O <sub>3</sub> Nanorod Array Deep Ultraviolet Photodetector. <b>2022</b> , 4, 3801-3806	4
49	Thickness effect on solar-blind photoelectric properties of ultrathin EGa <sub>2</sub> O <sub>3</sub> films prepared by atomic layer deposition.	0
48	Low-Temperature-Crystallized Ga <sub>2</sub> O <sub>3</sub> Thin Films and Their TFT-Type Solar-Blind Photodetectors. <b>2022</b> , 13, 7243-7251	1
47	Using magnesium reduction strategy to produce black Ga <sub>2</sub> O <sub>3</sub> with variable oxygen vacancies for photocatalytic applications. <b>2022</b> , 926, 166887	0
46	Surface plasma treatment reduces oxygen vacancies defects states to control photogenerated carriers transportation for enhanced self-powered deep UV photoelectric characteristics. <b>2022</b> , 604, 154459	1
45	Highly flexible deep-ultraviolet photodetectors using amorphous gallium oxide thin films grown by atomic layer deposition. <b>2022</b> , 33, 104268	
44	Crystallization, Phase Stability, Microstructure, and Chemical Bonding in Ga <sub>2</sub> O <sub>3</sub> Nanofibers Made by Electrospinning. <b>2022</b> , 7, 32816-32826	0
43	Texture evolution mechanism of pulsed laser deposited in-doped Ga <sub>2</sub> O <sub>3</sub> film affected by laser fluence and its application in solar-blind photodetector. <b>2022</b> , 205, 111469	0
42	Low-power-consumption ultraviolet photodetector based on p-NiO/SiO <sub>2</sub> /n-ZnO. <b>2023</b> , 157, 108634	1
41	GaN-Djoser Pyramidal Self Powered UV Photodetector for Optical Signal Detection in Rugged Environments. <b>2023</b> , 930, 167267	2
40	Electrical and optical properties of (In <sub>1-x</sub> Sn <sub>x</sub> ) <sub>2</sub> O <sub>3</sub> (1+ $\delta$ ) films (0.03 $\leq$ $\delta$ $\leq$ 0.40, 0.0.28) grown on Si substrates using co-sputtering of In <sub>2</sub> O <sub>3</sub> and SnO <sub>2</sub> . <b>2022</b> ,	0
39	Fully Transparent and High-Performance EGa <sub>2</sub> O <sub>3</sub> Photodetector Arrays for Solar-Blind Imaging and Deep-Ultraviolet Communication. 2200192	1

38	P-Type $\text{InGaO}_2$ Electronics: A Study on Gap States and Fermi Level Pinning and a Solution to Schottky to Ohmic Transition for Electronic Applications.	0
37	Enhanced Response Speed in 2D Perovskite Oxides-Based Photodetectors for UV Imaging through Surface/Interface Carrier-Transport Modulation. <b>2022</b> , 14, 48936-48947	3
36	Plasma-enhanced atomic layer deposition of amorphous $\text{Ga}_2\text{O}_3$ for solar-blind photodetection. <b>2022</b> , 100176	0
35	Transferable $\text{Ga}_2\text{O}_3$ Membrane for Vertical and Flexible Electronics via One-Step Exfoliation. <b>2022</b> , 14, 47922-47930	1
34	High-index-contrast photonic structures: a versatile platform for photon manipulation. <b>2022</b> , 11,	2
33	Amorphous $\text{Ga}_2\text{O}_3$ Schottky photodiodes with high-responsivity and photo-to-dark current ratio. <b>2023</b> , 933, 167735	2
32	Investigation on the AgPt and AgPd hybrid alloy nanoparticles (HANPs) for the hybrid $\text{MoS}_2/\text{ZnO}/\text{HANP}$ UV photodetector application. <b>2023</b> , 611, 155559	0
31	A self-powered dual-functional hybrid $\text{Cu}_2\text{O}/\text{SiNWs}$ heterojunction with applications in broadband photodetectors and ozone gas sensors. <b>2022</b> , 347, 113992	0
30	Heteroepitaxial Growth of an Ultrathin $\text{InGaO}_3$ Film on a Sapphire Substrate Using Mist CVD with Fluid Flow Modeling. <b>2022</b> , 7, 41236-41245	0
29	$\text{Ga}_2\text{O}_3/\text{GaN}$ -based solar-blind phototransistors fabricated using a thermal oxidation process performed on the GaN p-n junction layers. <b>2022</b> , 168057	0
28	Spontaneously Oxidized $\text{Cu}_{1-x}\text{O}_{\beta}\text{-Ga}_{\text{2}}$ p-n Junction for Self-Powered Deep-Ultraviolet Photodetection. <b>2022</b> , 1-5	0
27	Fabrication of low-cost and fast-response visible photodetector based on $\text{ZnS:Mn}/\text{p-Si}$ heterojunction. <b>2023</b> , 155, 107226	0
26	Enhanced low-temperature response of $\text{Ga}_2\text{O}_3$ -based oxygen sensor by modulating the surficial micro-nano structures. <b>2023</b> , 378, 133180	0
25	High performance solar-blind photodetectors based on plasma-enhanced atomic layer deposition of thin $\text{Ga}_2\text{O}_3$ films annealed under different atmosphere. <b>2023</b> , 936, 168127	0
24	Two-dimensional hole gas formation at the $\text{InGaO}_3/\text{AlN}$ heterojunction interface. <b>2023</b> , 936, 168315	0
23	Wafer-Scale, Thickness-Controlled p- $\text{CuInSe}_2/\text{n-Si}$ Heterojunction for Self-Biased, Highly Sensitive, and Broadband Photodetectors. <b>2022</b> , 4, 6284-6299	0
22	Defect induced ambipolar conductivity in wide-bandgap semiconductor SrS: Theoretical perspectives. <b>2022</b> , 121, 252102	0
21	Performance Enhancement of $\text{Ga}_2\text{O}_3$ Solar-Blind UV Photodetector by the Combination of Oxygen Annealing and Plasma Treatment.	0

- 20 Calcium Titanate Orthorhombic Perovskite-Nickel Oxide Solar-Blind UVC Photodetectors with Unprecedented Long-Term Stability Exceeding 500 Days and Their Applications to Real-Time Flame Detection. **2022**, 9, 4005-4016 ○
- 19 Interfacial oxidation and boundary amorphization deposition mechanisms of GaN powder on metallic substrate by low-pressure cold spraying. **2022**, 156221 ○
- 18 Liquid metal gallium-based printing of Cu-doped p-type Ga<sub>2</sub>O<sub>3</sub> semiconductor and Ga<sub>2</sub>O<sub>3</sub> homojunction diodes. **2023**, 10, 011402 ○
- 17 Ultrahigh Detectivity Broad Spectrum UV Photodetector with Rapid Response Speed Based on p-Ga<sub>2</sub>O<sub>3</sub>/n-GaN Heterojunction Fabricated by a Reversed Substitution Doping Method. 2206664 ○
- 16 The excellent performance of Ga<sub>2</sub>O<sub>3</sub> Schottky photodiode under forward bias and its application in solar-blind ultraviolet communication. **2023**, 33, 101032 ○
- 15 Tuning electronic properties in tin-assisted n-type Ga<sub>2</sub>O<sub>3</sub>:Zr thin films via PLD for p-n heterojunction. **2023**, 616, 156457 ○
- 14 High-temporal dynamic Ga<sub>2</sub>O<sub>3</sub> ultraviolet solar-blind photodetector via heteroepitaxy single crystalline film. **2023**, 34, 101073 ○
- 13 Optoelectronic artificial synapse based on Si<sub>1-x</sub>Sn<sub>x</sub> alloyed film. **2023**, 212, 112002 ○
- 12 A phase junction Ga<sub>2</sub>O<sub>3</sub> based high-performance self-powered deep ultraviolet photodetectors with Ti<sub>3</sub>C<sub>2</sub>/Ag nanowire hybrid conductive electrode. **2023**, 945, 169307 ○
- 11 Influence of oxygen vacancy and metal-semiconductor contact on the device performance of amorphous gallium oxide photodetectors. **2023**, 16, 021005 ○
- 10 Solar-Blind Deep-Ultraviolet Photoconductive Detector Based on Amorphous Ga<sub>2</sub>O<sub>3</sub> Thin Films for Corona Discharge Detection. 2200512 ○
- 9 A wire-shaped photoanode of the solar-blind photoelectrochemical-type photodetector based on an Ga<sub>2</sub>O<sub>3</sub> nanorods/electrolyte solid/liquid heterojunction. **2023**, 122, 071101 ○
- 8 Crystallographic Orientation-Dependent Resistive Switching in Ga<sub>2</sub>O<sub>3</sub> Thin Films. ○
- 7 Ultrahigh-Sensitivity and Fast-Speed Solar-Blind Ultraviolet Photodetector Based on a Broken-Gap van der Waals Heterodiode. ○
- 6 Modeling and simulation of Ga<sub>2</sub>O<sub>3</sub> thin film solar blind UV photodetector. **2023**, ○
- 5 Tailoring photodetection performance of self-powered Ga<sub>2</sub>O<sub>3</sub> UV solar-blind photodetectors through asymmetric electrodes. ○
- 4 Plasma Nitridation Effect on Ga<sub>2</sub>O<sub>3</sub> Semiconductors. **2023**, 13, 1199 ○
- 3 Scintillation Properties of Ga<sub>2</sub>O<sub>3</sub>; Translucent Ceramics Annealed at Different Temperatures. **2023**, ○

- 2 Lamb Wave Resonator for UV Photodetection and Impact of Induced Piezopotential on Schottky Barrier Height towards Enhanced Sensitivity. **2023**, 1-1 o
- 1 Laser CVD Growth of Uniquely <math>\langle 110 \rangle</math>-oriented Ga<sub>2</sub>O<sub>3</sub> Films on Quartz Substrate with Ultrafast Photoelectric Response. o